AMERICAN Gas Journal
NINETY-SEVENTH YEAR

NEWS AND FEATURES DESIGNED TO FURTHER COOPERATION AMONG UTILITIES, DEALERS, AND MANUFACTURERS

Merchandising

NUMBER 50 • JUNE, 1956

Electric Competition: A Challenge That Must Be Met

Survival of the gas industry in face of strong, hard-hitting competition from an aggressive electrical industry depends on the efforts of everyone in the gas industry . . . here's a review of what's happening and what needs to be done . . . NOW!

J. Theodore Wolfe
Baltimore Gas & Electric Company

THE gas industry is facing a great deal of competition from the electric industry on many fronts. It is competition that cannot be overlooked or lightly cast aside. It is firm, hard-hitting competition that not only must be met, but must be exceeded through better products, better services, and increased sales effort.

Just what is happening and how? To get a closer look at the current situation, let's take a closer look at the component parts of our gas industry markets. Imagine, if you will, these parts as bases on a nine-point baseball diamond. Each part is one base — and we have got to make the complete circuit to score a home run.

Cooking

It is no news that there is competition for the cooking load. Statistics compiled by GAMA have been telling the facts. There has been a trend in customer preference toward the electric range. Surveys conducted in 10 cities, under AGA's Demonstration City Program, reveal that one out of three present gas range users prefers an electric range for his next purchase. Why?

They say the electric range in **their** opinion, is cleaner, cooler, more modern, and has more automatic features. Say what you will, that's what **they** think. And **they** aren't going to think any less so when they hear about or see the new electronic oven, now being offered in limited quantities, which cooks a roast in a matter of minutes. Sure, it's a high priced appliance — $1000 or more at present for the oven alone — but it's designed to capture the public's enthusiasm for the ultra-modern.

Up to now, the gas industry has enjoyed at least two distinct advantages in the cooking field. One is price. The other is speed. I doubt that the competition is worried much about our price advantage, for there is plenty of evidence that the public, blessed with the greatest buying power in history, will overlook a price differential to get what it wants, at so much a month. The competition has been bothered about cooking speed, and both the electronic oven and the high-wattage top burner which, according to its maker, "cooks 20 per cent faster than gas," indicate a determination to do battle on this front.

Water Heating

With respect to the water heating load the gas industry, until very recently, has been enjoying a "Roman Holiday." The only real competition, at least in city gas territories, has been from summer-winter hook-ups on oil furnaces. But now, the electric industry is invading this field.

Market surveys in the ten demonstration cities surprisingly indicated that one out of five people interviewed prefers an electric water heater for his next purchase. **Why?**

Again, they think it is more modern. Some of them think it is safer. Unquestionably, it sometimes has an installation advantage, since it can be installed under a counter or in a small closet without requiring a flue. A number of ranch-type or split level homes are being built that simply have no suitable place to install a gas water heater.

Historically, the gas water heater has benefitted from three distinct advantages over its electrical competitor —

Editor's Note:

This article is based on a talk given by Mr. Wolfe at the recent Gas Appliance Manufacturer's Association meeting at White Sulphur Springs, West Virginia. Mr. Wolfe is a gas man who pulls no punches in describing the problems facing the gas utility industry with respect to its most avid competition. We cannot overemphasize this one important fact: the gas industry, to survive, must — NOW — start *DOING* instead of just talking and musing over what its competition has accomplished.

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". . . the public is enthused over anything that they feel is modern. Price is not as important today, as the public is blessed with the greatest buying power in its history . . ."

lower operating cost, faster recovery rate, and less troublesome installation problems. Only the operating cost advantage seems reasonably secure, and even that is sometimes overcome by the fact that an electric water heater, in a rambling type of home, can be installed close to the load center, thus avoiding the heat losses encountered with long runs of water piping.

And the manufacturers of electric water heaters claim — often with justification — that the high quality of their construction assures longer life. To many prospective buyers, this may be an offset to the higher operating cost.

Manufacturers of electric water heaters are determined to lick the recovery problem, and the new 4.5 kilowatt, 40-gal unit, which does approximately the same job as the old 82-gal, slow recovery unit, is a step in that direction. We may expect to see even higher wattage units on the market, possibly as high as 9 kilowatts, which will match or surpass the recovery rates of many of our present gas water heaters.

The electric industry as a whole is determined to lick the installation problem through its nation-wide wiring program, to which reference will be made later.

Clothes Drying

It is not news that electrical competitors have led the way in the sale of clothes dryers. There are more companies making them and they started sooner. Last year, they sold 912,000 units against 330,000 gas dryers. The American Home Laundry Manufacturers Association estimates that, by 1960, electric dryer sales will be at the rate of 1,500,000 a year, while gas dryer sales will be 480,000 — a ratio of three to one. **Why?**

We all know that operating costs are lower on the gas dryer—only one-third the cost of the electric in our area. The gas dryer does a faster and better job. But, the electric dryer has no pilot troubles; and at least three manufacturers of electric dryers have developed means of trapping the moisture laden air and lint and flushing it down the drain, thus avoiding need for periodic cleaning of a lint trap and also sidestepping the Hobson's choice that confronts the purchaser of a gas dryer, who must either pay for the installation of an outside vent or suffer the discharge of warm, damp air into his laundry, utility room or kitchen.

The fact is that the ratio of electric to gas dryer sales would probably be greater than it is if it were not that dealers are often unable to sell electric dryers because of inadequate wiring in the customers' homes. Whatever progress the electric industry makes in surmounting this barrier will facilitate electric dryer sales.

Refuse Disposal

I'm not sure whether refuse disposal belongs in this discussion or not. There is an electrical incinerator, but it costs vastly more to operate, requires the same flue and won't get rid of tin cans or glass bottles any better. The real competitors for the gas incinerator are:

(1) the electric garbage disposer, with its great convenience features,

(2) the City trash collector, who must be depended upon anyway for the disposal of tin cans and bottles, and

(3) the smog and odor conditions which, in certain areas, have led the governmental authorities to prohibit the use of incinerators.

This is not to say that there is no market for the gas incinerator. There is a good market, particularly in areas where trash disposal is a problem. Unless there is such a program, there is a real job of selling required to convince the housewife that she needs anything more than an electric garbage disposer, which we must recognize as an extremely convenient gadget.

Refrigeration

It would be unfair for me to spend much time talking about electric competition for the food preservation load, since there is at present only one manufacturer of gas refrigerators. Electric competition in this area has been extraordinarily severe because electric refrigerators have been:

Lower in price
Cheaper to operate
Better in performance and
Less troublesome to keep in service
They definitely have the customer's acceptance

Tests conducted on the new 1957 Servel refrigerator are convincing that it has met its competition on performance, bettered the competition on operating cost, and greatly improved its service reliability. The pendulum may well begin to swing back toward gas in the food preservation area.

Space Heating

Much of the post-war boom in gas industry sales has been attributed to the space or house heating load. The gas-fired furnace has occupied a pre-eminent position as the cleanest, most convenient, and generally most satisfactory form of heating device available. In addition, it has enjoyed operating cost advantages over other automatic heating devices in large segments of the nation-wide market, and has been less costly to install than its principal competitor, the oil furnace.

Only very recently has there been such a thing as electric competition for the house heating load. But we may as well face it — there is electric competition now and far greater electric competition in the offing. We can't afford to ignore it.

Electric resistance heating is a good business. Some 60 manufacturers are engaged in the production of electric resistance heating devices. Ten of them make only auxiliary heating devices, but the other 50 make both auxiliary and complete home heating equipment.

There are numerous types of electric resistance heating devices — glass, metal, or plastic panels for installation in wall, floor or ceiling, baseboard installations, radiant wall heaters, electric steam radiators, electric floor furnaces, etc. When properly made and installed in houses designed for their use, they offer the user numerous advantages — some real and some imaginary, **but all persuasive.**

They provide greater flexibility in the control of temperatures in individual rooms.

They may reduce the over-all cost of new home construction, because they avoid the necessity of a chimney, however, this saving is usually offset by the need for better insulation.

They allow more space for closets and recreational areas or work room, permit easier placement of furniture, and are completely clean, noiseless and odorless.

They are easy to expand when rooms are added.

Against these claimed advantages, some of which can obviously be disputed, there is one seemingly powerful disadvantage. They cost like the mischief to operate, unless electricity is available at a fantastically low rate, as it is in some parts of the country, such as the TVA area, where an abundance of cheap water power or a government subsidy or both are responsible. Electric resistance heating, properly designed and installed to permit 100 per cent efficiency, with electricity available at ½-cent per kilowatt-hour, is comparable in operating costs with gas at ten cents a therm, burned at 70 per cent efficiency.

Now, the point which we keep emphasizing is that *the public has demon-*

". . . electrical resistance heating may make serious inroads into the gas heating loads. Electric heating equipment of all types has been developed. The gas industry's answer is to perfect gas air conditioning . . ."

strated an amazing capacity to ignore cost in order to acquire what it thinks is the last word in comfort and convenience.

Even in cities like Cleveland and Baltimore, where the operating cost of electric resistance heating devices is two, three or more times the competitive cost of gas or oil heating, installations of resistance heating have numbered in the hundreds. And this not withstanding a lack of promotional effort on the part of the electric utilities. While reliable data is hard to obtain, I am told that there are 155,000 electrically heated homes in the TVA area and 30,000 others in the country today.

A leading electrical construction magazine has predicted that, by 1965, sales of direct electric heating equipment will exceed $250,000,000 a year. This prediction covers sales of the electric heat pump as well as resistance heating equipment.

A recent survey made by the Edison Electric Institute indicates that there were 4545 heat pumps in operation early this year — 1085 of them in the TVA area, 980 in Florida, 861 in California, 11 in Maryland, and the balance of 1608 scattered about the country, with eight states missing from the list of heat pump users and six others listing only one installation each.

These may seem like nominal figures, but it must be remembered that the electric heat pump is still in the developmental stage. One company claims to have sold 3500 in 1955, expects to sell 12,000 in 1956, get up to 30,000 by 1958, and is optimistically predicting that 1,000,000 homes will have heat pumps installed during the next 10 years.

It seems to be pretty well established that, except in special situations where underground water is available, air will be used as the source of heat for the heat pump. Without getting technical, the heat pump can be explained as a device that takes heat from the cold outer air and uses it to warm a house, and the same device can, by means of a reversed cycle of operation, cool a house by extracting some of the heat from it and discharging it to the outer air.

The significance of this is that the amount of electricity required to extract a given amount of heat from the air is perhaps one-third what is required to produce the same amount of heat with a resistance device.

With gas at 10 cents a therm, this would make electricity competitive at 1.5 cents per kwh, as against the ½-cent rate required for resistance heating. The heat pump is therefore aimed at overcoming the operating cost disadvantage of the resistance heating equipment.

It offers a real threat, particularly in areas where the winter climate is moderate enough for the heat pump to extract sufficient heat from the outside air to do the entire heating job.

In the more northerly sections of the country, it may be less of a threat because, up to now, it has been necessary either to install a unit which is grossly oversized for the cooling function or to supplement the heat pump with resistance heating devices which have a very high operating cost and impose a very poor load factor on the electric utility's lines. And, to be sure, the installed cost of an electric heat pump, now estimated at $3400 for a 5 ton unit, is far above the comparative cost of a side-by-side installation of gas furnace and electric cooler. Even an optimistic estimate of a $2150 cost by 1958, when production is estimated at 30,000 units a year, is $200 more than the estimate on the side-by-side installation.

We might be able to brush off electric heating as a serious competitor if it were not for two important considerations. **First** is that stubborn tendency of the public to go for what it thinks is modern. **Second,** and even more important, is the physical fact that electric utilities, due to the tremendous expansion of their air conditioning loads, are faced with sharply rising summer peaks, which come at a time when high ambient temperatures serve to reduce the effective capacity of their lines, transformers and other equipment—in some cases by as much 20 to 30 per cent. The electric industry will be forced to go all out on the promotion of heating unless . . .

Air Conditioning

Here we touch another base . . . **unless the gas industry can provide relief of the summer electric peaks by taking over a substantial part of the cooling load.**

Up to now, progress in this direction has been slow. We have had only one really good year-round, gas-fired heating and cooling device — the Servel absorption unit. It will do an effective job but its first cost and its operating cost have both been excessive.

There is no single room cooling *gas* device to compete with the electric window unit or room cooler.

As a consequence, electric competitors have been running away with the market. Here, undoubtedly, is the greatest challenge confronting the gas industry — a golden opportunity.

Commercial and Industrial

We tend to think that gas has a natural and almost insuperable advantage in all commercial and industrial applications requiring heat, simply because the cost of a given number of Btu's is invariably less with gas than with electricity. It is true that the commercial or industrial operator is primarily interested in cost, but we sometimes forget that the cost in which he is interested is the cost of his end product or service, not the cost of a single element such as fuel.

We, ourselves, have demonstrated this time after time by selling gas at twice the cost of oil per million Btu's by demonstrating that its greater flexibility, its greater controllability, its greater purity, or some other feature would produce a lower cost or better quality in the end product.

Our electrical competitors are playing the same game with us. They are preaching improved working conditions, better quality of end product, more reliability of fuel supply, increased flexibility of operation. They are designing all kinds of specialized equipment for space heating, degreasing, melting, baking, vulcanizing, brazing, deep fat frying, or down to the roasting or toasting of hot dogs and hamburger sandwiches.

For heating applications alone, there is a connected load in the United States today of 26,000,000 kw, which is producing for the electric utilities annual revenue of $730,000,000 or 17 per cent of their total industrial and commercial revenues. This not withstanding the fact that gas is inherently cheaper except with very high furnace temperatures — 2500 F or more and involving excessive flue losses — are required. Let's give them credit. That's a real selling job.

What To Do

Back at home plate, let's pause a few minutes to think about what our electric competitors are doing on an industry wide basis to improve and sell their products.

Against the $1,500,000 that AGA is spending this year on promotion and advertising, and whatever additional funds are being spent by individual gas utilities and appliance manufacturers:

One company alone plans to spend $10,000,000 in five years for its "Live Better — Electrically" program; upwards of $20,000,000 a year for con-

". . . biggest stumbling block in the advance of the gas industry is its price consciousness. Remember, the public, while shopping for price, demands quality. We are worrying about $5 and $10 and losing millions. . . ."

sumer advertising. Another plans to spend $32,000,000 for advertising, mostly for consumer products. The EEI will spend $1,500,000 to $2,000,000 for "House Power"; other manufacturers of electrical appliances—millions more for advertising.

Many millions for research.

What do we do about all this? Do we get discouraged and say, "What's the use?" Let's roll up our sleeves and get busier than we've ever been before.

A vice president of a large electrical appliance manufacturing company is said to have told a group of electric utility representatives, "We're out to kill the gas business."

If the gas business ever dies, it will be a case of suicide, not homicide. And it will be the most lingering and foolish kind of suicide —from starvation, a cutting off of the supply of brain power, muscle power, and dollar power required to feed the blood stream of a competitive industry.

Beating—Not Meeting Competition

It cannot be repeated too strongly that you must know what your competition is. But this can be overdone, and it can be fatal if we wait to see what our competitors do before we take action ourselves.

Believe me, our competitors aren't waiting for us.

One major manufacturer recently advertised a 2600-watt unit on its new range that would "cook faster than gas." This hit below the belt in a tender spot and the gas industry roared.

But the gas industry was caught napping. It has a 12,000 Btu, so-called giant burner. More than two years ago, the AGA laboratories developed a **midget** burner with a top Btu rating of 15,000 and they are now working on a burner that can go up to 23,000 Btu. If these burners had been on current models of gas ranges, the 2600-watt electric unit gimmick would never have occurred.

There Is An Answer

There is a program designed to keep these things from happening and for the gas industry to keep from getting caught. It is the ACTION Program for Gas Industry Development. It contains a number of basic points. It is a positive program. Nowhere in it is there a single reference to electric competition or any other kind of competition. It involves no looking back over the shoulder to see what someone else is doing. It demands forward movement, at full speed towards these five broad objectives:

(a) A continuous upgrading of the quality and performance of gas consuming appliances and equipment, to overcome the public's notion that gas is something less than modern.

(b) A general lifting of the level of activities and expenditures for the sale and promotion of gas and of gas consuming appliances and equipment.

(c) A re-orientation of sales and promotional emphasis towards gas appliances and equipment of the highest quality, even though they cost more.

(d) A renewed emphasis on the importance of making available to every gas customer competent facilities for the installation and servicing of gas appliances and equipment.

(e) A continuous and unflagging effort by all elements of the gas industry — utility companies, appliance and equipment manufacturers, trade associations, regional associations, and others —to work together, in the knowledge that combined effort is bound to be more effective than the sum of their individual efforts could possibly be.

Things To Look Forward To:

Cooking appliances that are ultra modern, clean, cool and fully automatic in every respect, equipped with universal burners capable of putting more heat into a cooking vessel faster than anyone has dreamed of claiming, and yet equally capable of applying that tender caress which does no more than keep the contents of a vessel warm, operated by valves which truly permit a thousand variable heats, boasting ovens that are foolproof, explosion proof and as fast as any self-respecting housewife could ask, not to mention broilers —

Gas water heaters that will produce more hot water faster than any competitive device, and without sacrificing the customer's investment through shortened equipment life . . .

Gas clothes dryers with pilots that can be lighted easily and will stay lit, and with means for disposing of lint automatically . . .

Gas incinerators that will burn up all the fumes and smoke, thus meeting the sternest of governmental requirements, incinerators that can be readily installed in any home, old or new . . .

Gas refrigerators that will act as the family service center for food and drinks of all kinds — hot and cold — and will outperform any refrigerator on the market today, available at competitive prices because of their large volume production . . .

Gas heating devices of all kinds, everyone made of the finest material and characterized by top quality workmanship — no more "tin cans and ducts," but only the very best equipment, properly designed and installed by well trained mechanics, guaranteeing long life and comfort satisfaction . . .

Combination gas heating and cooling systems that will cost less to install and operate than any other year-round air conditioning unit, maybe even a system designed for installation in a single room . . .

Gas fired equipment that will offer new concepts of convenience, controllability and speed in a multitude of industrial and commercial applications, thus assuring better quality and a lower cost of the end product or service . . .

All these must be sold aggressively by gas appliance and equipment manufacturers through well-organized, well-trained, and well-financed distributors and dealers backed by a powerful advertising program carried on through television, radio, magazines, newspapers, billboards, and what have you, and supported by an aroused utility industry, anxious to press forward on every front and willing to pay the cost of advancement in brainpower, muscle power and promotional dollars.

If there is one stumbling block in the way of this advance, it is the price consciousness of the gas industry.

You may blame it on the utility companies if you wish. I would agree that much of the blame belongs there. But all of us must soon learn that **the public, while shopping for price, demands quality.**

Ordinarily I believe in diplomacy, but when a utility executive tells you he doesn't want a new and important gimmick on one of your appliances because it will add five or ten dollars to the price, or when he deprives you of the money you desperately need for research and promotion because that, too, will add a few dollars to the price, the proper retort is *"Go to Hell."*

The first time a gas appliance manufacturer says that to a gas utility executive under those circumstances, I'll say, *"Amen,"* knowing that the ACTION Program for Gas Industry Development is really on the road. ★ ★ ★

Hot Water—Heated By Gas—Helps Greenhouse Firm Keep Roses Fresh

Filling 10-qt buckets with water heated to 115 F at Hill Floral Products Inc., Richmond, Indiana. Bunches of cut roses are then placed in the buckets. Cells in the rose stems absorb sufficient water so the blooms keep fresh and firm while in transit from grower to distributor. The hose is connected to piping leading to an automatic storage gas water heater in the basement of the building. The Hill firm has an annual production of 12,000,000 roses, 2,000,000 carnations, plus hundreds of thousands of gardenias, camellias and orchids.

IN RICHMOND, INDIANA, THEY'VE found another use for natural gas. It's being used to heat water that helps keep roses — of all things — fresh and firm while in transit from grower to distributor.

Richmond Gas Corporation supplies natural gas to Hill Floral Products Inc., who uses up to 150 gal per hour of 115 F water to assure roses being in perfect bloom when unpacked by wholesale distributors.

This hot water treatment of cut roses has been going on at Hill since the fall of 1953 when a gas water heater was installed to supply such "insurance."

The Hill organization, founded in 1881 and today one of the nation's oldest and largest greenhouse concerns, grows and ships 12,000,000 roses each year.

Normally, roses are placed in cold water immediately after the stem is cut from the bush in the greenhouse. However, there are times when immediate stem submersion is not possible. These roses are therefore in need of special attention to compensate for the minutes or hours they have been off the bush.

The special treatment they receive is an immersion of the stems in 115 F hot water. University and floriculture industry research has proved that cold water, like cold molasses, does not flow readily up the stems. "Hot" water is absorbed easier, faster and in larger quantities.

So, the Hill organization places cut roses in 10 qt buckets that are half-filled with the heated water. About one-third of the stem is immersed in the water heated by a gas water heater.

Buckets of roses are then placed for 12 hours in a refrigerator kept at 30-40 F. By the time the water temperature drops 75 deg, the roses have absorbed enough of the warm water to fill all the cells in the stems. The blooms, conditioned for transit, are removed and packed in boxes with cracked ice covering the stems. The flowers go forward to distributors by air freight, railway express or refrigerated truck.

George B. Canan, manager of Hill Floral Products Inc., says that most of the shipments reach their destinations early the next morning. "The roses arrive fresh and firm," states the greenhouse manager. "The benefits of this hot water immersion are that we are sure the roses have absorbed sufficient water to stand shipment, and the water has been absorbed much faster."

The water heater is located in the basement of the shipping department. Hot water piping extends upward through the floor to a faucet near the immersion stand on the first floor.

A two temperature feature of the water heater has proved extremely worthwhile at the Hill greenhouse during such peak periods as Christmas, Easter and Mother's Day. Rose cutting is heavy at these periods and plenty of hot water is needed.

The heater used is designed and constructed to store water at high temperature and to provide two outlet temperatures: one a 180 F and the other a mixed temperature of any selection.

At the Hill firm only the mixed temperature — 115 F — is drawn out of the tank. But, by storing the 180 F water, and through providing extra-fast recovery with high-input burners, the Hill greenhouse has a large amount of moderate temperature water available in a very short time.

Richmond Gas Corporation billed the Hill firm only $81.84 for the natural gas used in 1955 to heat the thousands of gallons of hot water required in this unique rose conditioning operation. ★ ★ ★

Merchandising News

Brooklyn Union Uses New Gimmick to Sell Gas Unit

Brooklyn Union Gas has a new gimmick for selling gas dryers — the company picks up housewives at their homes by car, whisks them and their weeks' soiled laundry to its Elmhurst (Brooklyn) Office, washes and dries it in the same machine and gives her a

big beautiful plastic laundry bag to take home the white-clean fluff dried clothes. And at no obligation, either. It's all part of a plan to introduce a new gas-fired appliance that washes and dries clothes in one unit.

"Automation" with Gas Featured In New AGA Campaign

The basis of a new advertising campaign prepared by Lennen & Newell, and launched by the American Gas Association is focused on the gas range and other gas appliances to show how modern automatic gas equipment has brought "automation" to the home.

Keyed to pin-point the modern innovations and improvements in gas appliances, the advertising copy is hard-selling, factual and realistic. Awakening the housewife to the fact that the modern gas appliance can bring about the best results with the least amount of time and effort is one of the main purposes of the new advertising approach.

The campaign, scheduled for the balance of the year, will appear in color in general weeklies, service and shelter magazines. These ads will show the gas appliances in modern settings to demonstrate how they fit in perfectly with any and all of the latest ideas in home planning.

Servel Extends Warranty for Air Conditioning Units

A new "quality assurance plan" has been announced by the Air Conditioning Division of Servel, Inc., that extends the warranty period of refrigeration units in "All-year" air conditioning models from 5 to 10 years.

The plan, available for 2, 3, and 5 ton units, is being offered to the company's air conditioning distributors on an optional basis, and includes, in addition to the extended warranty, a labor allowance to cover the average cost of unit replacement for the entire 10-year period. The new warranty and labor allowance plan is retroactive to cover all units shipped from the factory on or after November 1, 1955.

1956 Heating-Cooling Manual Now Available

The Heating Ventilating Air Conditioning Guide 1956, the 34th edition published by the American Society of Heating and Air-Conditioning Engineers, is now available and contains the latest technical and equipment information of interest to the profession and industry. The technical data section of this 34th edition contains 1176 pages. The catalog data section presents material concerning the products of 335 manufacturers.

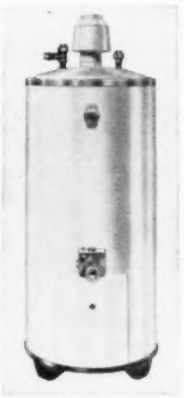
Particular attention has been given to the presentation of heat transmission coefficients of building materials in the new book. An important result is that the design values for conductivity and conductance are included for many more materials than in any other previous Guide. More tables make it easy to compute the effect of adding air spaces or insulations to walls, ceilings or floors.

Other material which has been rewritten is that concerned with automatic control and a description of current control equipment using the latest nomenclature.

The technical data continues to be presented in 53 chapters grouped under seven sections as follows: 1 — Fundamentals, 2 — Human Reactions, 3 — Heating and Cooling Loads, 4 — Combustion and Consumption of Fuels, 5 — Systems and Equipment, 6 — Special Systems, and 7 — Instruments and Codes. Retained also are the edge indexes for the Technical and Catalog Data Sections. The 24 x 32 inch ASHAE Psychrometric Chart also is included.

Cleveland Heater Celebrates Fifty Years of Operation

In celebrating its 50th year of operation, The Cleveland Heater Company, Cleveland, Ohio, has announced a new line of "Gold Seal" REX XXL automatic gas water heaters. They will be promoted by a year-long Golden Anniversary "SELLebration" during which new 1956 REX heaters will be given to owners of the oldest units made by Cleveland Heater and still in operation where originally installed.



Features of the new line are special gold trim, 50th Anniversary gold seals on each unit, a new deluxe gold finished thermostatic control located outside the jacket for greater convenience, a stainless steel pilot, and improved clean-out hole. Star of the line is the REX XXLR-40, with a 44.5 gal per hour rating at 100 deg rise.

A package sales campaign is being offered to REX customers to help them take advantage of their golden profit opportunity during the REX Golden Anniversary year. Key promotion will be an "Antique Heater Hunt" to be conducted by utilities and plumber-dealers in their sales territories.

Owners of the antique heaters will have them replaced by 1956 REX models of equivalent size at no cost whatsoever. At the close of the year, the owner of the oldest Cleveland Heater unit discovered in the United States will receive $100 in addition to his free heater. Dealer's sales representatives responsible for locating the old heaters will be given deluxe REX-Airate 20-in. "Dial-A-Matic" window fans.

Gas Water Heater Shipments Up 2.7 Per Cent for April

Automatic gas water heater shipments for 1956 were near the 1,000,000 mark by the end of April, according to the latest figures of the Gas Appliance Manufacturers Association.

The four-month total was 972,900, up 2.7 per cent from the 947,600 in corresponding period of 1955. For April the figure was 231,000, down 5.3 per cent from the 245,200 shipped in that month a year ago.

AGA-Colgate Laundry Sales Promotion Goes Over the Top

One of the most successful laundry promotions ever launched has recently been completed by the American Gas Association and Colgate with 150 gas companies, representing over 21,000,000 householders in 46 states, gas appliance dealers and supermarkets.

Timed to coincide with AGA's annual New Freedom Gas Laundry promotion in February and March, AGA and Colgate joined forces to tie-in modern gas laundry appliances with a new laundry detergent, AD. The theme was built around a national contest with 100 complete New Freedom Gas Laundries, valued at $100,000, as national prizes.

Colgate spent over a quarter of a million dollars promoting the contest nationally over major radio and television networks and for full-page ads in newspapers and trade publications. AGA's Promotion Bureau arranged for the New Freedom Gas Laundries for prizes and display purposes, mailed out how-to-do-it brochures and sales promotion materials, and coordinated the activities of the 150 participating gas companies which aimed at the local level.

The campaign is unique in that it is the first time one of the nation's largest soap companies has ever worked with the gas industry. Participating companies asked for a repeat in 1957 and other large soap companies, seeing AD's skyrocketing sales, are contacting AGA, asking to be included in similar promotions.

Counterflow Gas Furnace Feature in Kresky 1956 Line

Kresky Manufacturing Company, Inc., has produced a new Counterflow gas-fired central heating forced-air furnace for perimeter or floor panel heat distribution systems. The new units range from 75,000 to 150,000 Btu input in capacity. It has oversize blowers that enable it to be easily applied to air conditioning; filters that can easily be replaced without removing the flue pipe or draft diverters; and an extra heavy heating element that is die-formed and electrically welded.

Gas Bakeoff Given Big Play in California

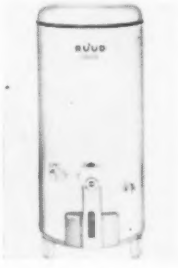
The National Orange Show recently was given widespread coverage by Southern California press and television media as the "World's Largest Baking Contest." The big gas bakeoff was held in San Bernardino, California, and sponsored by the Natural Gas Bureau, a two-company sales activity

of Southern Counties and Southern California Gas Companies.

The giant baking contest, held in conjunction with Sunkist Growers and the National Orange Show, featured 110 finalists baking orange cakes and lemon pies on a large array of new gas ranges.

New Gas Water Heaters Fit Almost Anywhere

New, low-height gas water heaters have been introduced by Handley-Brown Heater Company, Jackson, Michigan. Named "Compact" Imperial Speedmaster, the heaters' space-saving design permits installation almost anywhere in the home . . . even where standard-size heaters will not fit.



Either Superglas or zinc-lined models are available in 30 and 40 gal sizes. The 30 gal "Compact" offers either "HI" or "LO" input. HI (30,000 Btu) input models furnish abundant hot water for large usage . . . LO (5,000 Btu) input "Compacts" permit unvented installation and offer ample hot water for average-size family requirements with substantial fuel savings. The fast-recovery, 40 gal "Compact" supplies volume quantities of hot water for extra large demand. Input is 40,000 Btu (Natural), and 36,000 Btu (LPG).

The 30 gal "Compact" stands only 36½-in. high, and the 40 gal model measures 46½-in. high. Width of both heaters is only 23-in.

Today's Dream House Is Gas Equipped

What makes a dream house?

Caloric Appliance Corporation was faced with this question when their built-in oven broiler and top burner units were selected as the cooking equipment for the gas equipped "House that HOME Built," the theme conceived by NBC Television's Home Show.

The "House that HOME Built" is not the dream of any one person. In fact, it represents the composite dreams of a lot of people — with all kinds of backgrounds and ideas for comfortable living.

With the ideas of these "lots of people," the Research Institute of the National Association of Home Builders, NBC and Caloric in mind, three different houses are being built on Long Island. Each is a variation of the basic plan, so designed that the house can be oriented in many different ways on a lot as narrow as 60 feet. Builders across the country can choose their favorite model. Some will build all three. The cost will depend upon location and materials used, and, of course, upon the size of the house chosen.

Gas was chosen for both heating and cooking in the "House that HOME Built" for its economy, its speed, its convenience and its dependability. Caloric built-in units were chosen for their flexibility in planning the kitchens.

Many "dream home" extras are included, such as generous use of plastics and plywoods for beauty and comfort, provision for recessed and revolving television installations, built-in hi-fi tone chambers with remote loud speakers, indoor planting areas, touch control lighting, recessed "spot" lighting for unique decorator effects, indoor and outdoor barbeques, sound-proofed partitions between bedrooms and other rooms, and sliding partitions to open up bedroom areas.

The three models range in living areas from 1385 sq ft in the six-room "Celebrity" to 2085 sq ft in the eight-room "Spacesetter." The "Aristocrat" also is a six-room house with 1695 sq ft of living area.

Slab construction has been adopted so that the houses may be built with or without basements.

This then is the stuff that dream houses are made of — and they are to be ready soon. National opening date is September 22, which coincides with National Home Week. NBC's Home Show telecasts will originate from these Long Island "dreams."

CALENDAR OF THE GAS INDUSTRY

JUNE 1956

4- 7 Edison Electric Institute, Atlantic City, New Jersey.
4- 8 National Fire Protection Association, Hotel Statler, Boston.
4-29 Gas Technology Short Course, North Carolina State College, Raleigh, North Carolina.
8 NEGA Commercial group of CHI division, Hampshire House, Boston.
11-13 Appalachian underground corrosion short course, School of Mines, West Virginia University, Morgantown, West Virginia.
11 Joint meeting of AGA and INGAA rate committees, The Shamrock-Hilton Hotel, Houston, Texas.
14-15 AGA accounting section, managing committee, The Homestead, Hot Springs, Virginia.
17-22 American Society for Testing Materials, Chalfonte-Haddon Hall, Atlantic City, New Jersey.
24-26 Wisconsin Utilities Association, accounting section convention, Schwartz Hotel, Elkhart Lake, Wisconsin.
25-26 Michigan Gas Association, Grand Hotel, Mackinac Island, Michigan.
26-29 American Home Economics Association, Armory, Washington, D. C.
26-29 Canadian Gas Association, Manoir Richelieu, Murray Bay, Quebec, Canada.

JULY-1956

9-11 AGA, API, CPA committees on natural gas reserves, Banff, Canada.
9-13 National housewares and home appliance manufacturers exhibits, Atlantic City, New Jersey.
9-Aug. 8 Gas Technology Short Course, North Carolina State College, Raleigh, North Carolina.
16-20 Western summer radio-television and appliance market, Western Merchandise Mart, San Francisco.
24-27 NARUC annual convention, Shearton Palace Hotel, San Francisco, California.

AUGUST 1956

27-29 Annual Appalachian gas measurement short course, West Virginia University, Morgantown, West Virginia.

SEPTEMBER 1956

4- 7 AGA operating section, organization meetings, Hotel Cleveland, Cleveland, Ohio.
7 New Jersey Gas Association, 41st annual meeting, Spring Lake, New Jersey.
11 NEGA safety conference, Hotel Statler, Boston.
11-13 PCGA annual meeting, Hotel del Coronado, Coronado, California.
12-14 MidWest Gas Association, gas school and conference, Iowa State College, Ames, Iowa.
13-14 AGA-EEI accounting section organizational meeting, Edgewater Beach Hotel, Chicago, Illinois.
14 NEGA CHI division, Wachusett Country Club, Wachusett, Massachusetts.
14 AGA personnel committee, headquarters.
14-15 Maryland Utilities Association, 32nd fall conference, The Cavalier Hotel, Virginia Beach, Virginia.
17 AGA accident prevention committee, Shirley-Savoy Hotel, Denver, Colorado.
17-20 American Transit Association, Jefferson Hotel, St. Louis, Missouri.
18-19 AGA accident prevention conference, Shirley-Savoy Hotel, Denver, Colorado.
19-21 Southeastern Gas Association, Hotel Sir Walter, Raleigh, North Carolina.
19-21 American Trade Association Executives, annual meeting, Plaza Hotel, New York City.
30-Oct. 3 Controllers Institute of America, Waldorf Astoria, New York City.

OCTOBER 1956

4 NEGA, appliance servicing conference, Hotel Statler, Boston.
8-12 National Metal Exposition, Cleveland, Ohio, (AGA will exhibit.)
9-12 The American Dietetic Association, Milwaukee, Wisconsin.
15-17 AGA annual convention, Atlantic City, New Jersey.
15-19 National Metal Show, Cleveland, Ohio (AGA exhibit).
17-19 Wisconsin Utilities Association, electric and gas section convention, Schroeder Hotel, Milwaukee.
22-24 American Standards Association, Hotel Roosevelt, New York City.
22-26 National Safety Council, Chicago.
31 NEGA operating division, Hotel Statler, Boston.

NOVEMBER 1956

1-2 American Home Laundry Manufacturers Association, Conrad Hilton Hotel, Chicago.
12-15 American Petroleum Institute, Conrad Hilton Hotel, Chicago.
12-16 National Electrical Manufacturers Association, Traymore Hotel, Atlantic City, New Jersey.
12-16 National Hotel Exposition, New York Coliseum, New York City.
25-30 The American Society of Mechanical Engineers, Statler Hotel, New York City.

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Carrier Conducts School For Air Conditioning Men

Carrier Corporation is conducting several "schools" to provide information for gas utility sales engineers on large gas-powered air conditioning systems. The first was held at Carrier's Syracuse, New York, headquarters, April 9 and 10.

Purpose of the course is to equip men of the gas industry with the necessary techniques for selling and selecting the proper machine for applications where gas is the principal energy source.

The program is designed to cover "big" air conditioning and refrigeration systems for such important markets as multistory office buildings, department stores, hotels, hospitals, apartment buildings, industrial plants, and other large structures.

Special instruction will be devoted to operation, service, maintenance, sales features and customer benefits provided by the automatic absorption units which are available in capacities from 100 to 700 tons.

Additional classes will be held during the next few months.

Gas Measurement Short Course To Be Held in August

Plans have been completed for the 16th annual Appalachian Gas Measurement Short Course, August 27 through 29 at West Virginia University, Morgantown, West Virginia. The Short Course is attended annually by measurement and control engineers and other technical personnel representing the gas and petro-chemical industries.

Subjects to be covered in the three-day course will include the fundamentals of gas measurement and special sessions on domestic meters, orifice meters, large capacity meters, automatic control instruments, pressure regulators and other related equipment. Moderated forums shall be offered daily on specific phases of measurement and control.

Transco Wins Award Of Merit for Safety

Recognition for its 1955 safety record was given Transcontinental Gas Pipe Line Corporation recently by the National Safety Council. Transco won an Award of Merit for the 1955 record of only 25 loss of time injuries during more than 3,250,000 man-hours worked by its pipeliners.

Twenty of the company's 29 compressor stations and pipe line districts achieved perfect safety records in 1955.

Gas Installation and Application Course Offered

Washington Natural Gas Company is offering a once-a-week session for a total of 30 to 36 hours in installation and gas application techniques. Classes began in April.

The course consists of lectures and work-shop demonstrations conducted by Washington Natural specialists and experts from equipment manufacturing firms.

Washington Natural set up a special work-shop laboratory at its technical headquarters. The lab is equipped with all types of gas equipment and appliances so that enrollees may practice latest methods.

Course of instruction, including principals of combustion, controls, venting and various gas applications, was written by Avery Willis, assistant personnel director, and Harold Monnat, training instructor for Washington Natural.

Laboratory facilities are being used also to instruct Washington Natural employees. Technical manuals and other literature about gas and gas installation are available for enrollees.

Honored guest speaker at the opening session of the Southwestern Gas Measurement Short Course held April 17, 18, and 19 annually at the University of Oklahoma was Mr. Gas Measurement himself, Thomas R. Weymouth, pioneer natural gas engineer and executive. He developed the first orifice meter for measuring gas. He chats here with Tuesday's principal speaker, Chester S. Stackpole, managing director of AGA.

Heating and Air Conditioning Institute Marks 10th Year

Marking the 10th year of the Heating and Air Conditioning Institute, Coleman Company, Inc., is expanding the program of dealer education.

The Institute, which Coleman established in 1946, is a year-round training program for its manufacturing operations. The first week-long school was held for the dealers from Southern States April 16. A new group of about 50 dealers will attend the school each week until July 1.

W. A. Hattan, Coleman training director is in charge of the program. Instructors are from the staff of the manufacturer's sales engineering department under the direction of Jack W. Kice.

Housed in its own building near Coleman's main office, the Institute has 9,600 sq ft of floor space and contains approximately $70,000 worth of equipment for training in installation and servicing of the company's Blend-Air home heating and air conditioning systems. In addition, there is equipment for training in basic refrigeration techniques and electrical work.

Summer air conditioning is being emphasized during the first several weeks of the program, when dealers from the warmer states are attending. Dealers at later schools will be from the North and will have the option of specializing in air conditioning or heating.

Texas Gas Revises 1956 Construction Plans

Texas Gas Transmission has applied to FPC for authority to construct $6,233,000 in additional facilities in 1956 to meet revised estimates of customers' requirements for the 1957-58 heating season. Already underway is a $20,000,000 expansion program. Included in the application are additions of 12,320 horsepower at six compressor stations and approximately 40 miles of lines.

GAMA Elects New Officers

Julius Klein, president of the Caloric Appliance Corporation, Philadelphia, has been elected president of the Gas Appliance Manufacturers Association. At present he is second vice president of the association and will take office as president in October, succeeding W. F. Rockwell Jr., president of the Rockwell Manufacturing Company.

Other officers elected are as follows: first vice president, Clifford V. Coons, vice president and director of the Rheem Manufacturing Company, New York; second vice president, E. A. Norman Jr., president of the Norman Products Company, Columbus, Ohio, and treasurer, Stanley H. Hobson, president of the George D. Roper Corporation, Rockford, Illinois.

Thirteen GAMA divisions also have elected officers. The newly elected division chairmen, vice chairmen and executive committee members are:

Domestic Gas Range Division: chairman — Cecil M. Dunn, president of Magic Chef, Inc., St. Louis; vice chairman — John P. Wright, president of the Florence Stove Company, Chicago; executive committee member — Wendell C. Davis, president of Cribben & Sexton Company, Chicago.

Gas Wall and Floor Furnace Division: chairman — Harley Weatherley of Chattanooga Royal Company, Chattanooga, Tennessee; vice chairman — Lyman Mac Harg, general manager of Williams Furnace Company, Buena Park, California; executive committee member — Paul Hammond of Holly Manufacturing Company, Pasadena, California.

Gas Conversion Burner Division: chairman — Robert I. Warneke of Roberts Gordon Appliance Corporation, Buffalo; vice chairman — H. P. Mueller Jr. of Mueller Climatrol Division, Worthington Corporation, Milwaukee; executive committee member — E. P. Hayes, vice president of C. A. Olsen Manufacturing Company, Elyria, Ohio.

Gas Valve Division: chairman — Norman Reif of W. J. Schoenberger Company, Cleveland, Ohio; vice chairman — Howard Goss of Harper-Wyman Company, Chicago; executive committee member — Fred Schmidt, secretary and treasurer of The Roberts Brass Manufacturing Company, Mitchell, Indiana.

Gas Incinerator Division: chairman — Don Winegardner, assistant sales manager of The Majestic Company, Inc., Huntington, Indiana; vice chairman — William Hebert of Calcinator Corporation, Bay City, Michigan; executive committee member — F. H. Martin, vice president of Martin Stamping & Stove Company, Huntsville, Alabama.

Automatic Controls Division: Chairman — Karl Schick of Minneapolis-Honeywell Regulator Company, Minneapolis; vice chairman — E. B. Maire, vice president of Penn Controls, Inc., Goshen, Indiana; executive committee members—Frank Post of Robertshaw-Fulton Controls Company, Greensburg, Pennsylvania; F. G. McCloskey of Crise Controls Division of Acro Manufacturing Company, Columbus, Ohio; D. J. Wood of Titan Valve and Manufacturing Company, Cleveland.

Gas Unit Heater & Duct Furnace Division: chairman — T. D. Bromley, vice president, Gas Heating Division of Peerless Manufacturing Company, Louisville, Kentucky; vice chairman—R. A. Bell of Surface Combustion Corporation, Toledo, Ohio; executive committee member — David Webster, president of Reznor Manufacturing Company, Mercer, Pennsylvania.

Gas Appliance Regulator Division: chairman—Walter Lee of Major Controls, Carona, California; vice chairman—Wayne Schutmaat of Penn Controls, Goshen, Indiana; executive committee member — Frank Kern Jr., president of Maxitrol Company, Detroit, Michigan.

Gas Clothes Dryer Division: chairman — Franklin T. Grimes of Whirlpool-Seeger Corporation, St. Joseph, Michigan; vice chairman — Leroy Klein of Caloric Appliance Corporation, Philadelphia, Pennsylvania; executive committee member — Norman Millard of Crosley-Bendix Home Appliance Division of Avco Manufacturing Company, Cincinnati, Ohio.

Gas Boiler Division: chairman — Frank J. Nunlist, vice president of Mueller Climatrol Division, Worthington Corporation, Milwaukee; vice chairman — E. T. Selig Jr., director of engineering of Burnham Corporation, Irvington, New York; executive committee member — N. E. Westphal of Weil-McLain Company, Michigan City, Indiana.

Gas Water Heater Division: chairman — Frank Osborne, vice president of Mission Appliance Corporation, Los Angeles; vice chairman — David Cannon of Lawson Manufacturing Company, New Kensington, Pennsylvania; executive committee member —Harry B. Carbon, president of Bastian Morley Company, Inc., LaPorte, Indiana.

Gas Vent and Flue Pipe Group: chairman — C. E. Blome, director, industry relations of Metalbestos Division, William Wallace Company, Dallas, Texas; vice chairman — B. A. Johnson, vice president of Condensation Engineering Corporation, Chicago; executive committee member — Packer Brown, executive vice president of Van Packer Corporation, Bettendorf, Iowa.

Gas Furnace Division, chairman — Edwin A. Jones of Century Engineering Corporation, Cedar Rapids, Iowa; vice chairman — Keith Davis of Carrier Corporation, Syracuse, New York; executive committee member — Frank Meyer, president of Meyer Furnace Company, Peoria, Illinois.

Here, in one picture, is a phase of the story of ever-increasing domestic and industrial gas consumption typical of the national scene. The location is Brush Station, operated by The East Ohio Gas Company, serving greater Cleveland. As demand for gas increases, more and more cleaners are installed for scrubbing it.

Still minus their silver dress are five new 60 in. gas cleaners just installed; to the right are three 60-in. cleaners installed in 1953, and just out of range of the camera's eye are six 48-inch scrubbers installed in 1947.

On a peak day as much as 1.3 billion cu ft of gas goes into East Ohio's System and to insure top service, East Ohio cleans all of it.

PCGA Appoints New Managing Director

Guy W. Wadsworth, Jr., president of the Pacific Coast Gas Association, announces that Robert D. Scott will become Managing Director of the Pacific Coast Gas Association on August 1, 1956. For the past four years Scott has been in charge of sales with the Honolulu Gas Company, and for the past year has been a vice president of that company.

R. D. Scott

Scott will replace Mr. Clifford Johnstone who is retiring after having been Managing Director of the Association since 1924.

Men At Work IN THE GAS INDUSTRY

● **Ray Nelson** has been named to the newly-created position of air-conditioning engineer for Northern Illinois Gas Company with headquarters in Bellwood. A 20-year utility veteran, Nelson has been commercial engineer for the company in its Rock river area in western Illinois.

● **Karl K. King,** assistant superintendent of distribution for Manufacturers Light and Heat Company, has been advanced to administrative assistant to Vice President **G. E. Wilson.** King will be responsible for coordination of operating department budgets and assist in compiling special reports and studies.

K. K. King

C. H. World

● **Charles H. World,** who has been 39 years with The Consumers' Gas Company of Toronto, has been appointed manager in the Oshawa, Whitby, Bowmanville area for the newly acquired Ontario Shore Gas Company. He replaces **P. V. Bourne** who has been general manager of Ontario Shore Gas since 1950.

● **Dr. Edward R. Weidlein,** for over 40 years identified with the Mellon Institute of Industrial Research, has retired. He will remain on the Board of Trustees of the Institute and will be available in an advisory capacity in the administration of the Institute's research programs.

● **Robert E. Seymour,** assistant treasurer of The Peoples Natural Gas Company, has been assigned to the firm's executive department. His expanded duties will include direct supervision of all budgetary and economy program matters for the company and special assignments.

R. E. Seymour

● **B. T. Murdaugh** has been appointed regional sales and promotion manager for Lone Star Gas Company distribution properties in West Texas. He succeeds **John Perryman,** who has been named sales and promotion manager for Lone Star's Dallas division. **Kenneth N. Watkins** has been named manager of the dealer assistance section in the general sales and promotion department for Lone Star's general division of distribution in Dallas. **J. M. Lynn, Jr.,** has been named assistant sales and promotion manager for Lone Star's general division of distribution. Lynn will succeed **Carl L. Trevitt,** retired.

● At a regular Superintendents' meeting in Rochester Gas and Electric's auditorium, Rochester, New York, **Alexander M. Beebee,** president, received his 40 year service award from **Raymond N. Ball,** chairman of the board of the Lincoln Rochester Trust Company and chairman of the Executive Committee of the RGE Board of Directors.

● **H. R. Milner** has been appointed president of Canadian Western Natural Gas Company, Ltd., Northwestern Utilities, Ltd., and Canadian Utilities, Ltd. He succeeds the late **F. A. Brownie.**

● Three new appointments have been announced by the Bridgeport Gas Company: **Edward C. Bradfield** has been appointed superintendent of distribution succeeding the late **Harry A. Sautter,** and **Nils Kronow** and **Sigurd Clausen Jr.** were appointed assistant distribution superintendents.

B. C. Adams Sr.

R. M. Power

● **Ben C. Adams, Sr.,** has been elected chairman of the board for The Gas Service Company, Kansas City, Missouri. **R. M. Power** was elected president. Other changes are: **Ben C. Adams, Jr.,** general manager, was named vice president and **Jerry T. Duggan,** general counsel, also elected vice president. **I. W. McKee** was re-elected vice president and treasurer, **H. E. Dean** again is secretary, and **R. H. Barker** was renamed as assistant secretary and assistant treasurer.

C. E. Warsaw

J. L. Brownlee

● **Charles E. Warsaw,** vice president of The United Gas Improvement Company in charge of the Luzerne Electric and Gas Division has retired. He will be succeeded by **James L. Brownlee,** former manager of electric distribution and gas department of the Luzerne Division. Warsaw's entire career has been in public utility construction and operation, beginning in 1909 following graduation in Electrical Engineering at Iowa State College. He has been in Kingston, Pennsylvania, with U.G.I., since 1923. Brownlee has been with U.G.I. in Kingston since his graduation from Pennsylvania State University in 1921. He started as an assistant engineer, and advanced to his present position in 1945.

Dr. Malcolm S. McIlroy

Dr. Malcolm S. McIlroy of Ithaca, New York, professor of electrical engineering at Cornell University since 1947, died in March in Tompkins County Memorial Hospital, Ithaca. He was 53 years old. He was widely known in the water and gas industry for his development of a Fluid Network Analyzer. In 1949 he was awarded the John M. Goodele prize of the American Water Works Association for this significant achievement.

At Cornell, Dr. McIlroy held the positions of Associate and full Professor and Assistant Director of the School of Electrical Engineering. Until his death, Dr. McIlroy was consultant to The Standard Electric Time Company of Springfield, Massachusetts, who is licensed to manufacture and sell the McIlroy Analyzer.

Del Howard

Del Howard, gas engineer and consultant, died at his home in Dallas, Texas, in January. He was formerly employed in Oklahoma by Cities Service Company and also by Republic Natural Gas Company.

Personals

● **Howard L. Cline** of Houston has been named superintendent of compressor stations for Transcontinental Gas Pipe Line Corporation. Cline, was formerly assistant superintendent.

● **Frank C. Smith,** board chairman of the Houston Natural Gas Corporation, and former president (1953) of the American Gas Association has been elected chairman of the Board of Trustees of the Institute of Gas Technology, Chicago, for 1956.

● **Ralph D. Stauffer** has been elected president of the New England Gas and Electric Association Service Corporation, a subsidiary service organization of the utility system. Prior to his election Stauffer was vice president and chief engineer and director of electric operations for the Service Corporation.

Harry A. Sautter

Harry A. Sautter, 69, superintendent of distribution of the Bridgeport Gas Company for 48 years, died in January of a heart attack at St. Vincent's Hospital. He was a graduate of the Sheffield Scientific School, Yale University in 1908.

W. H. Davidson

F. B. Haverfield

● **Walter H. Davidson** has been named vice president for operations of Transcontinental Gas Pipe Line Corporation. Before his election he was vice president and general superintendent of the pipe line company. He will be succeeded by **F. B. "Duck" Haverfield,** former superintendent of compressor stations.

A. S. Roscoe

A. L. Roberts

● **Andrew S. Roscoe,** president of the Equitable Savings and Loan Association, has been elected to serve as a member of the Board of Directors of Brooklyn Borough Gas Cmpany.

● **A. L. Roberts,** general superintendent of operations for Texas Gas Transmission Corporation, Owensboro, Kentucky, has been elected a vice president of the pipe line company.

J. A. Millen

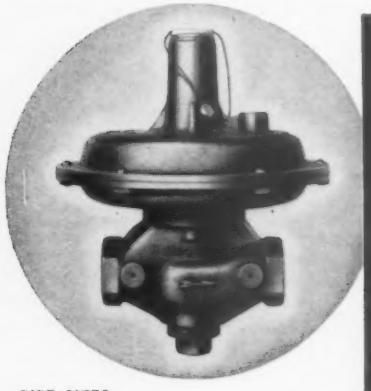
E. E. Richardson

● **James A. Millen** has been elected to the board of directors of Southern Counties Gas Company. As a vice president of the gas company, he heads its transmission and supply system, including the California portion of the Texas-California pipe line.

● **Ello E. Richardson** has been appointed general manager and a director of the Cambridge Gas Company. He succeeds **Gordon G. Howie.** retired. He has been associated with Cambridge Gas since 1925.

Steady

REYNOLDS LOW PRESSURE REGULATORS



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3" to 8" with flange connections

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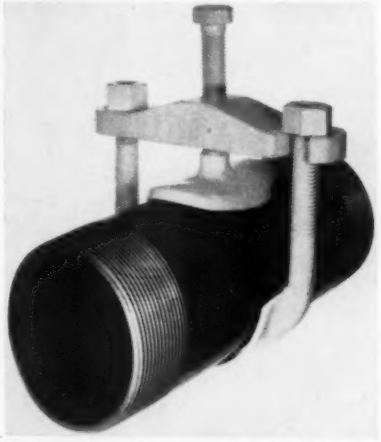
NEW EQUIPMENT
FOR THE GAS INDUSTRY

Reverse Acting Valve Power Unit. Eclipse has developed a valve power unit for controlling gas pressure build-up in supply lines. The Series "R" Reverse Acting Power Unit combined with an Eclipse Lock-Tite safety shut-off valve will postively shut off gas supply to the burner in case incoming pressure builds up beyond a safe point. These units are available in four standard tripping pressures ranging up to 10 psi.

Eclipse Fuel Engineering Company, 1002 Buchanan Street, Rockford, Illinois.

Patch Pipe Leaks. A unique new tool that repairs pipe leaks quickly, permanently and economically, has been introduced nationally by Atlas Industries, Inc. Tool consists of the Atlas Pipe Clamp and Atlas Patches that are accurately shaped to fit specific pipe sizes and assure a skin-tight fit when gasket is compressed. The Pipe Tool is made in two styles: the saddle type (shown)



in four sizes for use on pipe 6-in. in diameter and less; and the chain type in all sizes from 6 in. up to any size. The patches are made of steel with either neoprene or asbestos gaskets. One man can easily handle the tool. The clamp is placed around the leaking pipe, without shutting off line, reducing pressure or causing any loss of time or flow. Patch is applied directly over leak and sufficient pressure applied by the clamp to stop leak. Patch can then be welded to pipe or clamp can be left on until it is convenient to weld the patch. The permanent Atlas Patch seals the leak.

Atlas Industries, Inc., P. O. Box 8152, Houston, Texas.

New Impact Wrench. Thor power Tool, has announced a new version of its ½-in. square-drive universal electric impact wrench. Designated as the No. 56 Thor SpeedWrench, the tool replaces the Model 55 unit. The SpeedWrench is designed for fast nut-setting and removal. With the use of attachments it can also be used for drilling in

steel, wood, stone or other materials, as a screw-driver, and for tapping, driving or removing studs. Tool features "one-hand operation" through a finger-tip reverse button located in the handle behind the starting trigger. Single switch efficiency is made possible by concentration of all electrical connections in the handle. The No. 56 Thor SpeedWrench is 9⅝-in. long overall, weighs 7 lb and has a 1 7/16-in. offset. It develops forward and reverse speeds of 1900 rpm and delivers 1900 blows per minute. Striking jaws rotate to present a new surface for each blow as it is struck. Comes equipped with 15 ft of 3-conductor cable with 3-prong plug and adaptor with grounding wire. It is driven by a universal electric motor and standard models are rated at 115 volts.

Thor Power Tool Company, Aurora, Illinois.

Endothermic Generator With Automatic Ratio Control. Ipsen Industries, Inc., is now offering a unique, endothermic atmosphere generator featuring automatic dew point control of the base generator gas. It is a compact unit combining a gas-fired endothermic generator with the Dewtronik automatic dew point recorder-controller. By interlocking this controller with the generator, the prepared atmosphere gas is controlled within a narrow dew point range by automatic regulation of the air/gas ratio to the reaction tube. The result is continuous, fully automatic control of the prepared base gas analysis under such conditions as changing humidity and variations in analysis and pressure of the line gas.

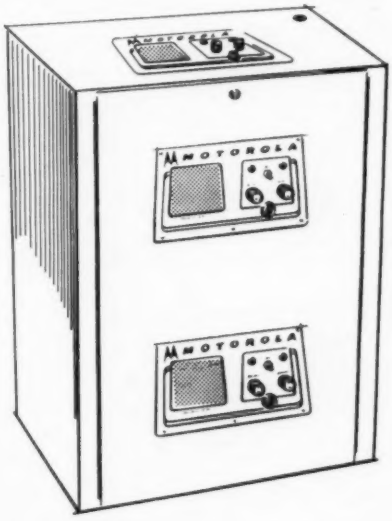
Will be available in standard sizes ranging from 750 to 500 cfh.

Ipsen Industries, Inc., 715 South Main Street, Rockford, Illinois.

Aluminum Safety Hat. A lightweight safety hat made of aluminum has been added to the line of safety hats offered by the Safety Division of the Davis Emergency Equipment Company. The new aluminum hat is comfortable and cool in hottest weather. The ribbed alloyed aluminum construction insures maximum strength and toughness. It resists impact in excess of 40 ft-lb, will not crack or break when dropped. Six-point, snap-in shock absorber suspension distributes and minimizes shock and the hat is waterproof. Equipped with a universal, adjustable cradle, one hat fits all head sizes and shapes.

Bulletin No. 1412, Davis Emergency Equipment Company, 47 Halleck Street, Newark, New Jersey.

"Compa-Station" Transmitter-Receiver. Motorola has announced the "Compa-Station" transmitter-receiver as an addition to its standard line of fixed FM 2-way radio equipment operating in the 25-54 or 144-174 megacycle band. This low cost, compact unit includes a 60 watt transmitter and the Motorola Sensicon "G" receiver.

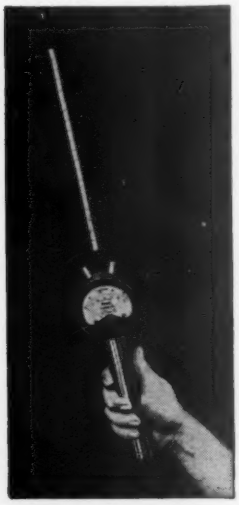


Features a removable control panel with built-in speaker that can be placed in any one of three positions on the cabinet for versatility in installation. It is easily adapted for 2-wire or 4-wire remote control operation from a remote control console. The unit operates from any standard 117 volt 60 cycle source. Weight is approximately 100 lb.

Motorola, Inc., Communications and Electronics Division, 4501 West Augusta Boulevard, Chicago 51, Illinois.

New Equipment

Portable Pyrometer. A new hand-held probe pyrometer, for use in all types of non-corrosive metallic and non-metallic liquids, all in atmospheres of furnaces, kilns, ovens, and other high heat containers has been announced by Pacific Transducer. Special features are its lightness and extreme portability; fine balance for constant hand use; chrome finish throughout that provides an external reflective surface that prevents absorption of heat that would normally change the cold junction temperature; and a built-in calibrating thermometer. Probe is 19 in. long and is available in two types.



The Pacific Transducer Corporation, 11836 West Pico Boulevard, Los Angeles 64, California.

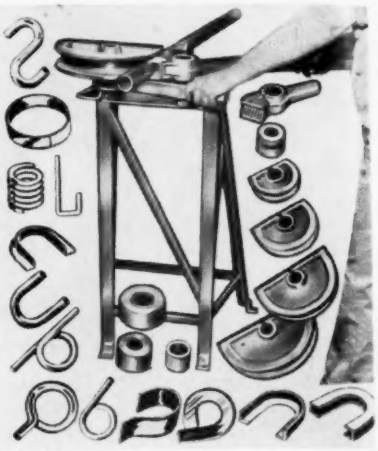
Air Grinder. More powerful air grinder designed especially for use in foundries and other metal working operations has been perfected and is now in production by Thor. Completely redesigned, the new Thor grinder has been designated the Model 5V. It is being made available in speeds of 4500, 6000 and 8000 rpm and features an adjustable, positive-speed governor, that increases air economy and is said to assure complete safety under all operating conditions.

Thor Power Tool Company, Aurora, Illinois.

New Top Solves Bird, Debris Problems. The problem of nesting birds and accumulating debris in external gas vent openings has been completely solved by an improved Belmont Top recently introduced by William Wallace Company. The new version includes an interior grille that effectively bars small birds from entering the vent outlet and acts as a filter to prevent twigs, leaves, paper and other debris from clogging the discharge opening. The newly-designed grille assures optimum vent performance, thus facilitating dependable, trouble-free venting throughout the house.

William Wallace Company, Belmont, California.

Portable Bender. J. B. Sebrell Corporation has announced a new 4-in-1 portable bender that bends tubes, pipe, reinforcing rods, and flat bars. It bends steel flat bars up to 2½ in. by ½ in.; round and rectangular steel and reinforcing steel bars up to and including 1 in.; bends steel pipe from ¼ in. to and including 1¼ in.; and bends steel, aluminum, and copper tubing up to and including 1⅝ in. Bender may be mounted on truck, workbench, 4 in. or larger vise, or on a metal stand.



J. B. Sebrell Corporation, 300 South Los Angeles Street, Los Angeles 13, California.

BORE with HYDRAUGER
(EARTH BORING MACHINE)

Designed for maximum control of the reamer. Earth along the pilot bits acts as a bearing to steady the reamer assuring an accurate hole.

FREE BOOKLET.. SEND COUPON BELOW

HY-25D

HYDRAUGER CORP., LTD. 681 MARKET ST. SAN FRANCISCO

Please send, without obligation to me, the HYDRAUGER BOOKLET which shows relative costs and speeds of BORING as well as specifications of various Hydrauger models.

NAME _____ ADDRESS _____

CITY _____ STATE _____

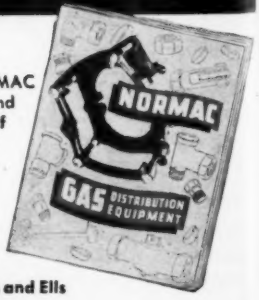
NORMAC

Couplings, Sleeves and Fittings . . .

- Save Time
- Handle Easily
- Give Dependable Service

Because They Offer...

- Maximum Deflection
- Ease of "Stabbing"
- Complete Confinement of Rubber



Today, write for your free copy of this NORMAC catalog . . . complete with illustrations and specifications on the entire Normac Line of Couplings, Sleeves and Fittings. It's a profitable step in the cost-cutting direction.

NORTON-McMURRAY MFG. CO.
122 South Michigan Ave., Chicago 3

Couplings • Meter Bars • Sleeves
Cocks • Ball Joint Clamps • Service Tees and Ells

New Equipment

Portable Heat-Flow Monitor. The HFG-2 Heat-flow monitor is a compact portable unit that reads directly in Btu's heat-flow through any surface in contact with the N. J. L. heat-flow disc. Application extends from checking the efficiency of structural, pipe, or window insulation to exploring the heat-flow loss of refrigerated or heated areas. Housed in a sturdy case, the 7-lb instrument includes the meter and polarity, range and transit switches. The disc, connected by 6-ft long leads to a plug-in resistance box, comprises a separate pre-calibrated assembly, that is entirely interchangeable for any future replacements. Heat-flow measurements are made in ranges of 0-30 Btu ft²hr, 0-60, 0-300, and 0-600. Precision of readings is one per cent and the meter accuracy .3 per cent.

National Instrument Laboratories, Inc., 6518 Rhode Island Avenue, Riverdale, Maryland.

Elite Line of Fork Trucks. Clark Equipment has introduced the Clarklift Line, an elite line of fork-lift trucks. Features are a 12-volt electrical system, fully automatic transmission, emergency fuel tanks, foam rubber seats and automobile-like controls as standard equipment. Exclusive features

never before available on fork trucks include self-adjusting brakes, a ballanced swing-up hood, solid tire models with drive and steer wheels of the same diameter, combination lift-tilt controls on the steering column, optional radiator screens for dusty operations, and all-purpose deep-tapered forks. Gas models with capacities ranging from 2000 to 5000 lb are included now; electric models and gas models of higher capacity will be added shortly.

Industrial Truck Division, Clark Equipment Company, Battle Creek, Michigan.

QUALITY CONTROLLED in every step of manufacture . . .

LONE STAR

API LINE PIPE

From mining of raw materials through the finishing operations in Lone Star's ultra modern pipe mills . . Lone Star line pipe quality is controlled every step of the way.

Lone Star Steel is a completely integrated operation . . primarily dedicated to serving the teeming Mid-Continent area. Lone Star, however, furnishes hundreds of miles of line pipe for distant projects such as the great Pacific Northwest pipe line. Lone Star pipe bends readily, wall thickness is uniform, and long lengths and weldability speed up construction.

Neighbor, wherever you are, specify Lone Star and we both get a good deal.

Lone Star STEEL COMPANY

LSS

EXECUTIVE-SALES OFFICES
W. Mockingbird Lane at Roper • P. O. Box 12226 • Dallas, Texas

DISTRICT SALES OFFICES
Houston, Texas | Midland, Texas | San Antonio, Texas
Tulsa, Oklahoma | Wichita Falls, Texas | Shreveport, La.

Just the ticket for those INDUSTRIAL and COMMERCIAL jobs!

ACCURATE! VERSATILE! FOOLPROOF!

A compact self-contained economical regulator designed to satisfy 90% of your commercial and light industrial regulator requirements.

For distribution use, it steps up the pressure as the demand increases to deliver gas when you need it.

For safe accurate regulation of large volume commercial or industrial services, use Model 461 as a monitor regulator with Model '1100' as the control regulator. Most of the parts interchange. Both are compact, accurate and versatile.

Bulletin 461 gives complete information.

461-1-56

ACCURATE CP MFG CO. DEPENDABLE

Chaplin-Fulton

MANUFACTURING COMPANY

Pittsburgh 25, Pennsylvania

NEW LITERATURE
FOR THE GAS INDUSTRY

Color for Safety. A new reference chart published by The Arco Company outlines the use of color in safety practices for the protection of property and personnel. Chart (12 by 17 in.) contains pipe line identification by color and uniform color code for safety.

The Arco Company, 7301 Bessemer Avenue, Cleveland 27, Ohio.

Btu Control Information. Cutler-Hammer, Inc., has announced publication of a 24-page booklet covering Btu control information for public utility and industrial gas plants. Entitled "Where Experience Counts," the booklet contains information on gas dilution and enrichment, gas stabilizing and mixing operations; plus additional data, installation photos, special features and schematic diagrams involving various Cutler-Hammer gas mixing and measuring systems, applicable to any combustible gas, industrial, high pressure natural gas, standard city gas, catalytic cracking plants, LP-gases, blast furnace gas, coke-oven gas, etc.

TM-20, Cutler-Hammer, Inc., 202 North 12th Street, Milwaukee, Wisconsin.

New Plan Book. Servel, Inc., has released the 1956 gas refrigerator sales, promotional, advertising and display plan book. Entitled "Blueprint for Profits," the book describes in detail the 1957 gas refrigerator line, an outline of the Servel national advertising campaign, displays, sales promotion aids, and the announcement bulletin and registration form for the annual Servel gas refrigerator sales contest.

Servel, Inc., Evansville 20, Indiana.

Air Cleaner. An improved version of Goodyear Tire and Rubber Company's self-charging, electrostatic air cleaner for heating, ventilating and air conditioning systems has been placed on the market. Called Heavy Duty Pliotron, the new air cleaner is constructed in three sections, each unit consisting of electrostatic plastic materials. The intake side is a screen of vinylidene chloride and the outlet side is made of a plastic-bonded, glass-fiber mat. Sandwiched between the outer layers is shredded polyethylene film, the material used in Standard Pliotrons.

Folder S-5161, Industrial Products Division, Goodyear Tire and Rubber Company, Akron, Ohio.

Air-Cooled Heat Exchangers. An informative 24-page bulletin describing the latest developments in air-cooled heat exchangers has been published by The Griscom-Russell Company, a subsidiary of General Precision Equipment Corporation. Bulletin fully describes the design details, construction, distinctive features and applications of the Griscom-Russell air-cooled unit known as the G-R fin-fan exchanger. Also included in the bulletin are specifications, sketches of available arrangements, and descriptions of mechanical equipment and control apparatus for various service requirements.

Bulletin 2400, Griscom-Russell Company, Massillon, Ohio.

Compressor Catalog. A new engineering catalog describing the newest Cooper-Bessemer Type FMP compressor is now available. The Type FMP reciprocating compressor is built for

field pick-up service, gas boosting, air drilling and general industrial use. Available with either single or twin frames, with single or multi-stage compressor cylinders. Ratings are up to 600 horsepower as belt-driven or completely "packaged" unit.

Bulletin No. F-80, Cooper-Bessemer Corporation, Mount Vernon, Ohio.

Plans for Home Heating. Twelve plans for home heating and air conditioning are covered in a brochure recently published by Iron Fireman. Each plan covers a different heating system and its application to installations for maximum service.

Iron Fireman Manufacturing Company, 3170 West 106th Street, Cleveland 11, Ohio.

General Catalog. The second edition of the Automatic Temperature Control Company's General Catalog is now ready for release to the field. Presented in the new catalog is a complete picture of the products and services offered by ATC for the field of automation. Some of the products covered are differential transducer control and automation systems, a complete line of time control equipment including electronic, equipment operator mechanisms, valves, counters and electronic contactors.

Catalog D-31, Automatic Temperature Control Company, 5200 Pulaski Avenue, Philadelphia 44, Pennsylvania.

Electric Tools. A universal electric tool catalog is being distributed by Thor Power Tool. Thor's complete line of Silver Line and Speed Tool electric tools for use in the automotive, industrial, construction, maintenance, trade crafts, and home workshop fields, is illustrated and described in the 44-page publication, which is printed in two colors.

Thor Power Tool Company, Aurora, Illinois.

Darcova Cup Packings. Extensive engineering and specifying data is contained in a new bulletin on Darcova valve cups, seating cups and seating rings, recently issued by Darling Valve & Manufacturing Company. Bulletin includes tabular charts giving dimensions of cups for API barrels, also for some other common pumps of various sizes, recommendations as to the proper use of available cup textures and list prices covering the full range of Darcova valve cups, seating cups and seating rings.

Bulletin 5502, Darling Valve & Manufacturing Company, Williamsport, Pennsylvania.

New Flowmeter Catalog. Fischer & Porter Company have published a 16-page catalog describing their new glass tube variable-area Flowrator meters. Catalog describes in detail the models available, various types of tubes and floats, predictable performance characteristics, construction features, and accessory equipment.

Catalog 10-A-25, Fischer & Porter Company, 692 Jacksonville Road, Hatboro, Pennsylvania.

Heating-Air Conditioning Guide. The Heating Ventilating Air Conditioning Guide for 1956, the 34th edition published by the American Society of Heating and Air Conditioning Engineers, is now available and contains the latest technical and equipment information of interest to the profession and industry. The technical data section contains 1176 pages and the catalog data section presents material concerning the products of 335 manufacturers. $12.00 per copy.

American Society of Heating and Air Conditioning Engineers, 62 Worth Street, New York 13, New York.

TRADE NEWS OF THE GAS INDUSTRY

Norge Washer and Dryer List Prices Hiked

Suggested list prices of Norge automatic gas clothes dryers have been raised $10 a model. The new prices are effective immediately. Suggested list prices on gas clothes dryers are from $159.95 to $319.95.

"Basic hard costs, such as increased costs of motors, steel, and copper creep up closer and closer to our selling prices and now we find we cannot absorb them any longer," declared R. C. Connell, vice president in charge of sales, in listing reasons for the increase.

Utility Men Earn Servel Star Salesmen Awards

Star salesmen awards have been presented by Servel, Inc., to Eugene D. Scott and Gilbert L. Conway, members of the sales staff of the Northern Indiana Public Service Company, Hammond.

Scott and Cook received gold and silver emblems, respectively, for Servel refrigerator sales since January 1, 1950, the date on which the recognition plan was inaugurated. Scott has sold 102 refrigerators during the six-year period, and Conway 78.

Roots-Connersville Opens Pittsburgh Sales Office

Roots-Connersville Blower, Division of Dresser Industries, Inc., Connersville, Indiana, has opened a Pittsburgh sales office in the Grant Building. Edward N. Bonnett heads the new office.

Swing boom tractor made pipelaying a fast job in the Judah Heights area north of Detroit, where McDace Construction Company laid 10,000 ft of 2 to 6-in. gas mains in 10 days in ditch averaging five feet in depth.

Workers load the first major shipment from the new Dresher, Pennsylvania, plant of Selas Corporation of America: four automatic gas-fired furnace settings, for processing uranium ore. In each of these enclosed duradient settings, radiant heat and combustion products are directed at a kettle bottom at short range, for extremely fast heating and efficient heat transfer, producing temperature uniformity within a few degrees Fahrenheit. The settings will be operated by control panels, with fully automatic safety, pilot, and precision temperature program controls. These units have cut cycle time for this process from days to hours. The furnaces have been completely fabricated at the Selas factory, and are shipped complete with combustion system, ready for installation of the stainless steel kettle.

Fluor Expands Los Angeles and Houston Offices

Fluor Corporation, Ltd. has underway three precast, tilt-up concrete buildings to house an additional 180 engineers and draftsmen at the main offices in Los Angeles. Other facilities to be used in the $500,000 expansion program for the engineering and manufacturing firm will include a $72,000 employee cafeteria, a $51,000 file and supply building, and a new $58,600 electrical center for the entire 27-acre main plant area. Completion is scheduled for early December.

Completion of a new $300,000 engineering and office building at Fluor's Mid-Continent Division headquarters in Houston, Texas, which will add space for about 120 engineers, draftsmen and office personnel, is scheduled for next September.

Florence Stove Guarantees Price Protection to Dealers

E. L. Taylor, national sales manager, Florence Stove Company, Chicago, manufacturer of Florence Gas Ranges, has announced that the company is offering their dealers guaranteed price protection until October 1, 1956, on all orders placed prior to August 1, 1956.

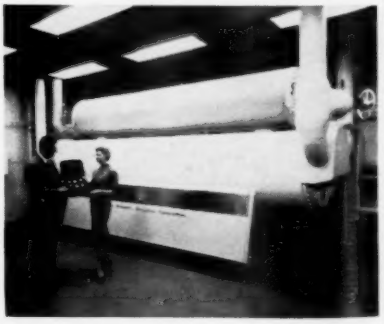
Barton Instrument to Build New Concrete Plant

Planned for completion in July, a modern building of 30,000 sq ft for Barton Instrument Corporation, costing in excess of $200,000.00 and located on 5½ acres in Monterey Park, California, is now underway. The plant will be of concrete slab, tilt-up construction, without windows or skylights, and will be completely air conditioned. Parking for customers and plant personnel will be provided on 53,000 sq ft of paving.

Peace-Time Pace Passed For Industrial Furnace Sales

The industrial furnace industry, which last year set a peace-time record, is doing business at an even faster pace this year. Figures released by the Industrial Heating Equipment Association reveal that orders received by member companies during April of this year totaled $8,803,284. This is an increase of 15 per cent over orders received during April of last year. It is a jump of 152 per cent from the comparable figure of $3,496,293 for April, 1954.

Total business to date in 1956 is $38,253,261, an increase of 50 per cent over the $25,571,994 figure for the first four months of 1955. It is 170 per cent ahead of the comparable figure of $14,304,193 figure for 1954.



Big Cooling Machine; Small Maintenance. All of the spare parts required for normal maintenance of this large-capacity "pushbutton" automatic absorption refrigerating machine easily fit into a briefcase. They include pump seals, valve diaphragms, ball check valve, small sight glass and gaskets. The absorption machine has no major moving parts, operates on the heat energy from steam, and supplies chilled water for air conditioning or process refrigeration duty.

Lone Star Gas Co. —Cleveland users for over 30 years

More than 30 years ago The Lone Star Gas Company of Texas purchased its first Cleveland Trencher and has been a regular purchaser of Clevelands ever since. Today Lone Star provides natural gas service for approximately 750,000 customers in Dallas and Fort Worth and more than 400 other cities and towns throughout Texas and Oklahoma.

The Cleveland Model 140, shown at right and below on a Lone Star construction project, is digging 2,400 feet of trench for a 6-inch line and 2,000 feet for a 3-inch line in the vicinity of Second Avenue and Catalina, between Dallas and Rylie on U. S. Highway 175.

Cleveland 140 here is digging trench from which tunnel will be bored for a street crossing.

Full crawler mounting, low ground bearing pressure make Clevelands easy on lawns, walks, etc.

Complete operator visibility, easy working controls, help to cut trench exactly where it's wanted.

Talk it over with your Cleveland distributor

THE CLEVELAND TRENCHER COMPANY • 20100 St. Clair Ave., Cleveland 17, Ohio

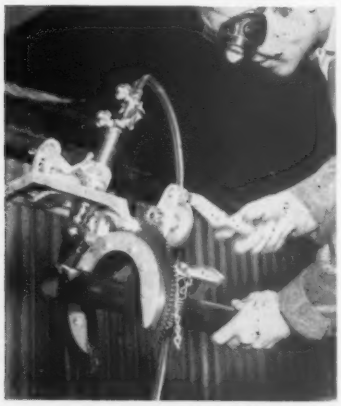
CLEVELAND®

Latest expansion movement made by Fischer & Porter Company is the million dollar construction of a new two-story building in Hatboro, Pensylvania. The 91,000 sq ft office building will be completely air-conditioned.

H&M INTRODUCES A SENSATIONAL FIRST!
TRADEMARK REGISTERED

The MODEL "O"

a Pipe Beveler with a Cutting Range of 1½" to 4"



PAT. APPLIED FOR

★ Perfect Bevels at maximum speed!
★ Easy to Operate!
★ No More handcutting!
★ Completely Portable! (Weight: 7½ lbs.)

Employing the same split-gear horseshoe principle which has made its larger models so popular for years, H & M now offers the maximum in speed and *quality* of *bevels* for beveling small-diameter pipe! Built to withstand any job conditions, the H & M Model "O" can be operated easily and efficiently by unskilled operators — *with perfect bevels every time!* Change from one size of pipe to another can be made in a matter of seconds, with precision-made adapters, and a quick operating boomer strap allows rapid transfer from one pipe to another. *For detailed information on the fast-selling Model "O", contact your nearest H & M dealer immediately, or contact the factory at once!*

Other "light as a feather" H & M models save Time-Money on Pipe from 4" to 36"

H&M PIPE BEVELING MACHINE COMPANY
TRADEMARK REGISTERED
Tulsa, Okla.
311 East Third St. Diamond 3-0241

John Wood Company Enters Heating Field

John Wood Company, manufacturers of water heaters, tanks, gasoline pumps and metal dairy equipment has purchased the Fluid Heat Division of Anchor Post Products, Inc., Baltimore. The transaction, involving upwards of a million dollars, covers the machinery, equipment and inventory in Baltimore and plant and also the plant site and buildings, machinery and inventory at Red Oak, Iowa.

The company plans to move machinery and equipment from Baltimore and integrate it within one of its plant locations at Conshohocken, Pennsylvania; also maintaining the facilities at Red Oak, Iowa, to serve western customers.

Included in the line and to be called John Wood Fluid-Heat and John Wood Fluid-Aire, is heating equipment for both gas and oil in a wide range of sizes from industrial to the smallest known domestic application; rotary-type and gun-type oil burners; a gravity type for both gas and oil; and air-conditioning equipment for domestic use.

Bryant Expands Headquarters

Bryant, producer of home heating and cooling equipment, has begun construction of an administration and engineering research building at its national headquarters in Indianapolis.

Scheduled for completion by August 31, the expansion involves a complete remodelling and an addition to provide four times the present office space in the former Shield Press building now on the site.

"Star Salesmen" Awards Given by Servel

"Star salesmen" awards of gold emblems for more than 100 refrigerator sales have been presented by Servel, Inc., to R. R. Clements, of Logansport, and C. J. Inbody, of Goshen, members of the sales staff of the Northern Indiana Public Service Company, Hammond.

"Star salesmen" qualification awards, earned for 25 or more retail refrigerator sales, have been presented to seven members of the Mobile Gas Service Corporation sales staff. The group includes four Mobile men, Henry J. O'Conner, James J. Merig, Walter E. Underwood, and Charles L. Dyas. The other awards were presented to John H. Castle, Anthony O. Terrell, and Edward S. Stone, all of Springhill. Castle also received a silver emblem set with a ruby for making 50 sales last year.

Peak Shavings

Small Bobby was playing on the back porch when suddenly there was a great clattering and banging out there.

"Bobby," called his mother, "what are you doing?"

"Nothing," he answered. "Nothing at all."

"What are you doing it with?" demanded his mother.

A small voice answered: "With a hammer."

☆ ☆ ☆

"Won't you join me in a cup of coffee?"

"You get in first."

☆ ☆ ☆

A woman appeared at the Bureau of Missing Persons and reported her husband had vanished into thin air six and a half months previously.

"Good heavens, woman," exclaimed the officer, "Why did you wait so long to report this?"

"Well," she admitted, "the first week my heart hurt me too much, thinking he just didn't love me. The second week my pride hurt me too much, thinking he's probably run off with another woman. And for the last six months my conscience has hurt me too much, thinking what a whale of a good time I've been having.

☆ ☆ ☆

Nothing is impossible to the man who doesn't have to do it himself.

☆ ☆ ☆

A beggar with a hat in each hand approached a man. "What's the idea of two hats?" the man said.

The begger replied: "Business was improving, so I opened a branch office."

☆ ☆ ☆

If you would speak for all to hear avoid the flowing cup,
For after too much bottled cheer your tang gets toungled up.

☆ ☆ ☆

"How was the applause after your speech?" asked the fond wife when her husband returned after an evening engagement.

"Terrible," he moaned. "It sounded like a caterpillar in sneakers romping across a Persian rug."

☆ ☆ ☆

The only person who has a right to run others down is the elevator boy.

☆ ☆ ☆

Sign on the back of a plate glass panel truck: Honk your horn and we'll gladly move our Royal glass over.

☆ ☆ ☆

A little man came home unexpectedly to find his wife in the arms of another man. Seizing the man's umbrella our hero raised it high above his head with both hands — then brought it down sharply over his own knee. It broke in two. "There," cried the little man, "I hope it rains."

☆ ☆ ☆

After a dramatic pause the lawyer said: "Look carefully at the man." Then he paused again for a long time.

"Now, ladies and gentlemen of the jury. You've looked carefully at the defendant. Can you sit there in the jury box and believe that if he had a quart of whiskey he would sell it?"

☆ ☆ ☆

A neurotic builds air castles. A psychotic lives in them. A psychoanalyst collects the rent.

QUALITY PRODUCTS
JOHN WOOD
SINCE 1867
For QUALITY and SERVICE
Glass-lined or Galvanized
JOHN WOOD
JOHN WOOD Automatic Gas Water Heaters are highest-quality heaters, known for their dependable, trouble-free performance. Nationally advertised. Fully warranted. A wide variety of sizes, models, and prices to meet any sales situation.
JOHN WOOD
AUTOMATIC Gas
WATER HEATERS
Made and warranted by one of the country's oldest, most reliable water heater manufacturers. Conshohocken, Penna. and Chicago, Ill. Approved by the American Gas Association and endorsed by Mrs. America®.

TRADE PERSONALS

ABOUT MEN WORKING WITH THE GAS INDUSTRY

● **George A. Naab** has been appointed manager of Pneumatic and Electric Equipment Co. (PEECO) in Philadelphia, Pennsylvania, succeeding **P. F. Smith, IV,** who resigned to accept a position as dealer sales manager of Schramm, Inc., West Chester, Pennsylvania.

● **D. E. Ollendorf** has been appointed eastern district manager for Gar Wood Industries' construction equipment division in Findlay, Ohio. Ollendorf will supervise sales activities for Virginia, Maryland, West Virginia, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Massachusetts, New Hampshire, Vermont, Rhode Island and Maine. The territory also includes Quebec, New Brunswick and Nova Scotia.

C. H. Simon

D. F. Sable

● **Charles H. Schreyer,** recently elected president of Darling Valve and Manufacturing Company, has announced several changes within the company. These are: **Carl H. Simon** elevated to vice president and general manager. **Dick F. Sable** assumes the position of general sales manager. **Thomas C. Jester** to chief engineer from assistant chief engineer. **James N. Elwood,** former plant manager and general superintendent, to manager in charge of manufacturing. **Packer B. Young,** former assistant sales administrator, to assistant sales manager.

● **A. A. Pieper,** an accounting consultant who has held positions with industrial firms in New York, Indiana, and Illinois, has been appointed controller of Servel, Inc. He was formerly vice president of accounting at Republic Aviation Corporation, Farmingdale, New York, and controller of Ball Brothers Company, Inc., Muncie, Indiana, and Ditto, Inc., Chicago.

● **Albert W. Smith** has been named assistant manager of the sales, marketing and public relations consulting department of Ebasco Services. He joined Ebasco in 1952 as advertising and sales promotion consultant.

M. A. Bergman

● **Madonna A. Bergman** has joined the home economics department of Robertshaw-Fulton Controls Company. She was formerly engaged in home economics test work with a major appliance manufacturer.

● **Dale McArthur,** formerly factory service and parts manager of the Moore Stove Division of the Conlon-Moore Corporation at Joliet, Illinois, has been appointed district sales manager for the entire line of Moore gas space heaters in southwest Missouri, northwest Arkansas and northeast Oklahoma.

● **Harold J. Fryar** has rejoined the Coleman Company, Inc., as director of purchasing. He first joined Coleman in 1928, leaving the company in 1948 to become general manager of the Weathermaster Corporation. For the past several years he has served Beech Aircraft Corporation, as manager of procurement.

Victor Mauck

Earl Hudson

● **Victor Mauck,** 82, dean of the automatic water heater industry and associated with John Wood Company for 65 years, has retired from its Board of Directors. He joined the John Wood Company as office boy in 1891, and eight years later bought the company from his uncle, John Wood, Jr. Pioneering in the field of low-voltage electric welding, he was the first to perfect the continuous welding of tube steel in large diameters and heavy gages.

● **Earl Hudson,** assistant general manager of Rockwell Manufacturing Company's gas meter plant at DuBois, Pennsylvania, has been named general manager of the company's new 100,000-sq ft meter and valve plant at Porterville, California. He has been with Rockwell since 1937.

● CDC Control Services, Inc., Hatboro, Pennsylvania, announced personnel changes and additions as follows: **J. Lawrence Tecosky,** former secretary, has been appointed vice president and contract manager; **Jack C. Boonshaft,** formerly vice president in charge of engineering with the Fischer and Porter Company, is CDC's new consulting mechanical development engineer; **Caldwell Jones** has joined CDC as contract engineer, he was formerly director of his own organization of automation consultants; **David P. Goodwin,** recently chief engineer with Gemac, Inc., is now electronic development engineer at CDC; **Alfred Krieg,** now CDC's procurement engineer, was formerly president of his own company prior to which he was executive engineer with Catalytic Construction Company.

● **William J. Fields** has joined the sales force of the Tappan Stove Company, Mansfield, Ohio, as the territory manager for northern Indiana. He was formerly with Graybar Electric Company, and Admiral Distributing Company.

● **M. R. Gilbert, Jr.,** has been appointed district manager of the heating controls division in the Chicago area for Robertshaw-Fulton Controls Company. He joined the company in 1953 and for the past year served as sales representative in the cooking appliance controls division.

● **Fred S. Hudson** has been named general manager of sales for the heating and air conditioning division of National-U.S. Radiator Corporation, Johnstown, Pennsylvania.

Cleveland V. McConnell

Cleveland V. McConnell, a former vice president of the Tappan Stove Company and a member of the board of directors, died at Mansfield, Ohio, in March following an extended illness. Joining the Tappan Stove Company in 1925 as district sales manager, he became sales manager in 1927 and vice president of the firm in charge of sales in 1945. He retired in 1951.

Carl Vincent Alexander

Carl Vincent Alexander, chief engineer, Dearborn Stove Company, Dallas, was killed in an automobile accident in West Texas in January. A native of Waynesburg, Ohio, Alexander joined Dearborn in 1946 as an engineer in the company's new product development division. He was name chief engineer in 1955.

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Personals

● The Perfection Industries Division of the Hupp Corporation has announced two sales management changes. **Marion Miller** becomes Mid-West Regional Manager, replacing **F. J. Rudolph,** who will move to the home office in Cleveland, Ohio, as assistant to General Sales Manager **Donald G. Wright.**

● **Robert M. Marberry** has joined Whirlpool-Seeger Corporation as special executive assistant to **Jack Sparks,** general sales manager, distribution. Previously director of sales, Sparton Radio and Television Division, The Sparks-Withington Company, Marberry has had more than 20 years experience in major appliances and electronics merchandising and sales.

● **John W. James,** vice president of research for McDonnell and Miller, Inc., Chicago, has been elected president of the American Society of Heating and Air-Conditioning Engineers.

Raymond Stevens

Arnold Carlin

● **Raymond Stevens** has been elected president of Arthur D. Little, Inc., Cambridge, Massachusetts. He has been a vice president of the company since 1930. He succeeds **Dr. Earl P. Stevenson,** who is now ADL board chairman.

● **Arnold Carlin** has been appointed a sales engineer in the air conditioning division of the Pacific Scientific Company. He will represent White-Rodgers Controls and Alco Valves for Pacific, operating from the firm's Los Angeles office.

● **Kenneth H. Gayle, Jr.,** president of Delta Tank Manufacturing Company, Inc., has been elected a director of General Gas Corporation. He was formerly president of The Ingalls Iron Works Company, Birmingham, Alabama.

● **Mark W. Battersby** has been appointed Northwest factory representative for Chambers Ranges, Inc. In addition to working with distributors and dealers in Idaho, Oregon, and Washington, Battersby will conduct a special merchandising program for home builders and architects.

● **Harold J. Luke,** a certified public accountant who has a 15-year background in accounting and finance, has been appointed assistant to the vice president in charge of finance of Servel, Inc.

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practical wherever sun is plentiful and other fuel scarce. In both India and Burma solar cookers are produced and sold for $25 down to a dollar or two.

Perhaps the best example of modern application is American Telephone's solar battery which turns the sun's rays directly into electrical current. This tray-like arrangement is perched atop telephone poles in rural areas where it supplies just enough booster current to carry the voice. Company executives are happy about the battery but admit it is only 11 per cent efficient.

Sun future

Solar energy fans radiate when they talk about the future. Their two main points: (1) the fuel is cheap and unlimited; (2) because a solar collector has few moving parts, repairs and maintenance would be little. However, this skips over the initial investment which could be huge.

The Arizona Public Service Company hopes to be the first utility to build a large solar power plant. Giant reflectors on the desert could generate steam to turn the turbines; juice would be wired into homes and factories.

Another sun-power idea is individual solar collectors on every housetop; the fuel would be free but the utility company would serve as installation, backstop and maintenance crew. But nobody is sure what this would cost nor how soon present theories and experiments can be turned into reality.

Dozens of other companies try to get the sun on their side. Johns-Manville is interested in the household applications, Pillsbury Mills eyes the possibilities in food and mighty duPont works diligently and says little. Still other companies watch, wait and say nothing at all (General Motors, Borg Warner, Detroit Edison, etc.).

Many of these will certainly watch the progress of a big solar project in French West Africa—of all places. Near the village of Abidjan on the Ivory Coast the French Thermal Energy Society has invested almost $3,000,000 on an unusual plant to generate electricity and pump water, too.

* * *

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Here-a year ahead of time

Advanced new 1957 **Servel**

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The amazing 1957 Servel outmodes, outdates, *obsoletes* every other refrigerator! Makes and serves ice cubes *automatically!* Defrosts *automatically!* Controls temperature *automatically!* Add powerful features like 10 year warranty on the refrigerating unit, silent dependable operation (out of the 4,000,000 Servels sold, 3,500,000 are still in use!) and you've still only *begun* to hint at the appeal of this big new beauty! It has...

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